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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,411	02/27/2002	Robert Stenberg	01-926 72242 (6653)	7376

7590 09/25/2003
LSI Logic Corporation
Corporate Legal Department
Intellectual Property Services Group
1551 McCarthy Blvd., M/S D-106
Milpitas, CA 95035

EXAMINER

DO, THUAN V

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,411

Applicant(s)

STENBERG ET AL.

Examiner

Thuan Do

Art Unit

2825

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 12-18 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,10 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 12-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. This non-final office action is responsive to amendment entered 08/14/03. Claims 1,4-9,12-18 are pending in this office action. Claims 2,3,10,11 have been cancelled.

The search found a prior art with the new ground rejection as following:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,4-9,12-18 are rejected under 35 U.S.C. 102(b) as being unpatentable over Nag, Pat. No. 6,099,583.

Regarding claim 1: Nag teaches a method comprising:

- (a) placing and wiring an integrated circuit design (col. 1, lines 37-56);
- (b) generating a slack graph to identify critical paths in an integrated circuit design (col. 11, lines 13-17) ;
- (c) removing non-critical paths from the slack graph (col. 25, line 62 through col. 26, line 20) ;
- (d) calculating a corresponding traversal weight for each edge in the critical paths (col. 12, lines 18-20 and col. 38, lines 25-67) ;
- (e) assigning a net weight value to each edge in the critical paths from the corresponding traversal weight (col. 25, line 62 through col. 26, line 20 and col. 38, lines 25-67) ; and
- (f) re-placing and wiring nets according to the net weight value to eliminate the critical paths from the integrated circuit design (col. 25, line 62 through col. 26, line 20).

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Regarding claims 4,9,12: These claims teach a method, computer system or software similar to the method of claim 1 and rejected in the similar manner.

Regarding claims 5,13: Nag teaches a method with traversing (col. 38, lines 36-67 with reverse direction along each path) and summing the input path weight (col. 31, lines 16-28).

Regarding claims 6,14: Nag teaches a method with sorting (col. 11, lines 3-6).

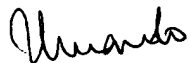
Regarding claims 7,8,15-18: These claims teach well known features to support their independent claims and rejected in the similar manner.

CONTACT INFORMATION

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 703-305-2362. The examiner can normally be reached on Monday-Friday 8:30-5:30 (except 2nd Fridays).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on 703-308-1323. The fax phone numbers for the organization where this application or proceeding is assigned are 703305-3431 for regular communications and 703-305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0596.



Thuan Do
Patent examiner
9/9/03